

The official magazine of

CATWALK™

Funding research to cure spinal cord injury



December 2023

Luke Alderton

Page
18

Chairman's Report
Luminary 2024

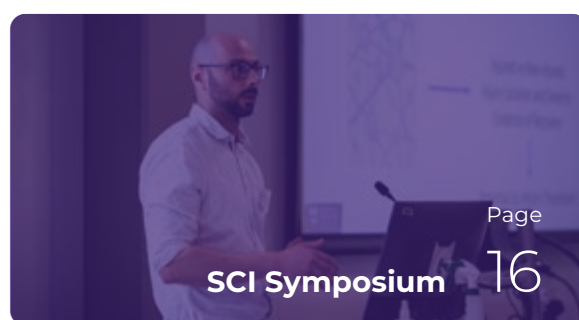
6
14

December 2023
This issue

A special thank you
to our supporters
who help us produce
this magazine

Content

Founder's Footnote.....	3
International Patron.....	4
New Trustees	5
Chairman's Report.....	6
Funding Graphic	8
Research Update New Zealand.....	10
Research Update Australia	12
2024 Event – Luminary.....	14
SCI Symposium.....	16
Spotlight – Luke Alderton.....	18
Brain Bee Challenge.....	20
Frustrating Moments – Hamish Ramsden.....	21
HT Systems.....	22
Charly the Campervan.....	23
The Great New Zealand Tee Off.....	24
The CatWalk Golf Open.....	25
Thanks	26
Corporate Sponsors.....	27



National patrons: Richie McCaw ONZ; Dr Rick Acland, Dion Nash; Lance O'Sullivan, ONZM; Aaron Slight MNZM; Toni Street, Sir Mark Todd, CBE; Sarah Walker, Duane Kale ONZM; Dame Lowell Goddard, DNZM, KC.

Trustees: David Pretorius (Chair); Grant Sharman (Deputy); Tom Brady; Paul Wilcox; Fiona Webby; Simon Manners; Kirsty Rueppell; Tara Satyanand; Professor Martyn Goulding; Lee Taniwha.

On the cover: Luke Alderton

Founder's Footnote



Elijah, Charlotte, Daniel, Catriona and Georgina



Top: Brian and Pam Nally



Bottom: Sal and Bridgie Lowry, Sam Williams, Sal Apatu and Tess Geard

Dear CatWalkers

How has your 2023 been? Busy? Again?! Well, roll on 2024 – and I'm incredibly excited about the year ahead, there's so much to look forward to.

For starters, soon anyone will be able to take Charly, NZ's only accessible campervan for hire, on a roadie and, know that while taking a holiday, you're also supporting two fantastic NZ charities doing incredible work, CatWalk and The NZ Spinal Trust.

Charly is schmick! All the trimmings which an able-bodied camper has, like leather seats, sleek lights and finished woodwork but also with purpose-built necessary functional requirements like a good wet floor shower, pull out drawers and sitting up the front for the view – along with some other cool stuff like a press button couch that turns into a readymade double bed (on the first night at least!)

We have our 'Awesome Foursome' to thank for turning the dream Charly to reality – cool and on the road ready. CatWalk's ex-chair Scott Malcom and Jane Taylor, John and Kristine Messara, Sitipek and

the Kepitis family and Maryanne Green and the Hugo Foundation. We love our 'Awesome Foursome' and cannot thank them enough for being responsible for the opportunity for us all to take a fully accessible, super fun, uber cool roadie.

I got asked recently, 'why have you made it so high spec?' and it's because for me going on holiday is a treat, an escape from home, work, routine. A reward for things like a tough year, a job well done or a university degree completed and, if I'm rewarding myself, I want it to be special.

Charly is just that thanks to our fastidious builder ACM motorhomes. The Milner Mobility team, www.milnermobility.co.nz who have many years of experience in dealing with clients with disabilities are your port of call to check out Charly's details. You can be confident that they'll guide you well to ensure a fun safe Charly experience.

We will be progressively releasing photos over January of Charly as we lead up to the Charly launch at Milner Mobility on January 25th. If you would like to join us at the

launch for the first viewing of Charly please contact chris@catwalk.org.nz

As I sign off, it's after a magic weekend in Hawkes Bay. Thank you James Erskine, Tony, Vicky and Jeanna Rider, Guy, Bridgie, Tom and Sal Lowry and OH. And as for Robbie – you are a rockin' legend! Some CatWalkers here you may recognise.

Catriona

P.S.

Pop an X on your calendar for **June 22, 2024** – book your accommodation in Auckland, it's the next unmissable CatWalk dinner! No need to feel guilty about a new dress, a glam night out or a naughty weekend away... with your support CatWalk gets a massive funds boost to 'back' the very best cutting edge worldwide SCI research.

Come, play and let's help make it CatWalk's best evening yet!



Stanley Zhang from Auckland placed second in the International Brain Bee in Washington.

International Patron

Kia ora and warm greetings to our CatWalk friends in New Zealand.

Over the time I've been involved with CatWalk, I've become very aware of the long term and lasting relationships you've built with your legion of supporters, and with the broader Spinal Cord Injury community.

Relationships are key to so many things in life and they're absolutely critical to driving sustained pieces of work such as the international push to find a cure for SCI. We all know that finding a cure for long-term medical challenges isn't a matter of short term fixes – but we also know it can and will happen.

On that note, in my previous column I briefly mentioned the Brain Bee Challenge – certainly a long-term CatWalk commitment which you've supported since 2008,

and which encourages high school students to take an interest in the human brain and neuroscience.

How amazing and inspiring to learn that since our last magazine, Stanley Zhang from Auckland placed second in the International Brain Bee in Washington, alongside students from Hong Kong and Iran! Stanley also won the Neuroanatomy/Neurohistology Award for the top score in this section. Amazing stuff.

While there's no doubting it's a long road, it's thanks to inspirational young people like Stanley, and the ongoing support of CatWalk, that the future of research remains bright and full of hope.

Have a wonderful New Zealand summer everyone! Kia kaha.

Zara Tindall
MBE

“Relationships are key to so many things in life and they're absolutely critical to driving sustained pieces of work such as the international push to find a cure for SCI.”

New Trustees

CatWalk is privileged to introduce three new Trustees to the CatWalk Board.



Tara Satyanand

Tara is currently Director of Engagement for the Royal Society Te Apārangi following on from her previous role as Head of Research for Cure Kids, investing in medical research with the potential to transform the health of children across Aotearoa New Zealand and the Pacific Islands.

After studying both Arts and Science, Tara completed a Masters (Hons) in Molecular Biology and Genetics, and began her career in the Department of the Prime Minister and Cabinet and at the Health Research Council of NZ. Moving to London, Tara spent 3 years writing and editing for medical journals at the World Health Organization and The Lancet. She then joined GlaxoSmithKline as a Science Advisor on Pandemic Influenza, and spent the next 10 years focused on controlling infectious diseases across Europe, Asia, Australia, New Zealand, and the Pacific Islands.

Tara brings a curious and creative approach, with a broad range of experience across the public, private, and not-for-profit sectors. She's keen to apply her experience in biotechnology R&D to help the CatWalk Trust target its investments towards research which has the greatest potential to generate breakthroughs for people living with spinal cord injuries.



Professor Martyn Goulding

Renowned neuroscientist Professor Martyn Goulding, Ph.D, joins us in his position at The Salk Institute for Biological Studies in the USA, where he is the Professor and Departmental Chair of the Molecular Neurobiology Laboratory and the Frederick W. and Joanna J. Mitchell Endowed Chair.

With a distinguished career in unraveling the complexities of neural circuits in the spinal cord, Professor Goulding brings unparalleled expertise to this crucial intersection of science and advocacy. His groundbreaking work, marked by a keen understanding of the intricacies of the nervous system, has earned him international acclaim, including the prestigious Brain Prize in 2022 for his pioneering work: <https://lundbeckfonden.com/the-brain-prize/circuits-movement-2022>

As a board member, his commitment to advancing spinal cord injury research aligns seamlessly with the Trust's mission to fund innovative projects that offer hope to those affected. His strategic vision and scientific acumen will be invaluable to the Trust as we head towards a future marked by transformative breakthroughs in spinal cord injury treatment and rehabilitation.



Lee Taniwha

Lee (Waikato Tainui, Ngāti Maniapoto) is a dynamic force in community engagement and inclusivity. With a rich background in fostering diverse collaborations and advocating for accessibility, Lee brings a unique perspective to the intersection of community impact and medical research.

Lee is the CEO of Care Upfront, a dedicated homecare service provider to support those with complex or long-term care in the home. The needs of those requiring care are deeply understood by Lee who suffered a spinal cord injury at aged 13 when diving into a pool.

Lee's appointment underscores the Trust's dedication to a holistic approach in spinal cord injury research. With a proven track record in driving positive change, Lee's passion for inclusivity aligns seamlessly with the Trust's mission to improve the lives of individuals affected by spinal cord injuries.



Back row: Tom Brady, Tara Satyanand, Simon Manners, Fee Webby. Front row: Kirsty Rueppell, David Pretorius (chair), Grant Sharman (Deputy Chair). Absent: Paul Wilcox, Martyn Goulding, Lee Taniwha.

Chairman's Report

Our vision is a world free from spinal cord injury paralysis and the role of CatWalk is to fund exceptional research to achieve this purpose.

As Chairman of The CatWalk Spinal Cord Injury Research Trust, it is my pleasure to present the Annual Accounts for financial year end 31 March 2023.

Focusing on outcomes for those living with spinal cord injury, the CatWalk Board of Trustees prudently follow the independent advice of our scientific advisory experts to carefully channel our supporters' donations into the most promising research available.

“Thanks to the generosity of our donors, \$768,765 was paid out this year to critical, world-class spinal cord injury research.”

Research

I am delighted to report that between 1 April 2022 - 31 March 2023, and thanks to the generosity of our donors, **\$768,765** was paid out to critical, world-class spinal cord injury research.

Research funding covered a number of promising areas of scientific exploration including:

- Applying sustained electrical fields to the damaged cord to determine overall efficacy when incorporated into a bioelectronic implant to direct axonal regeneration after SCI – the third year of a three-year project by Associate Professor Darren Svirkis.
- Bruce Harland's two-year fellowship creating electroceutical therapies to treat spinal cord injury in a preclinical model will test second-generation bioelectric implants that are flexible, and use electrodes that are less prone to degeneration. It will focus on one of the most promising therapies to spinal cord injury and explore how well the implants are tolerated; seeking to provide evidence for axonal regeneration.
- Neuroprotection through a series of functional studies to see if the distribution of calcium binding buffers are altered in the injured spinal cord and therefore if they create neurodegeneration – a two-year study by Dr Sheryl Tan.

“After being delayed for two years, the Grocery Charity Ball was hosted in at Auckland’s Langham with great success. \$300,000 was raised for spinal cord injury research through auctions, raffles and pledged donations.”

- Sponsorship of the Brain Bee Challenge – a high school competition encouraging students in Year 11 to learn about the brain and its functions, the latest advances in neuroscience research, and career pathways.
- Project Spark: building on the eWALK trial evidence, this project aims to take the research out of the lab and into mainstream use. Project Spark involves a series of rigorous clinical trials and community-based studies with the initial aim of improving respiratory, hand and upper limb function.
- Our continuing support of the Spinal Cord Injury Research Facility to maintain ongoing research programmes to develop novel treatments and to attract new ideas through local and international biomedical and clinical collaborations – under the Directorship of Dr. Simon O’Carroll.
- The CatWalk Trustees were very happy to sponsor the inaugural SCI Symposium held at the University of Auckland. The goals of the symposium were to: bring together stakeholders with a mutual interest in improving the lives of those with spinal cord injuries, to gain an understanding of what the needs are for those with an SCI, to disseminate research progress related to SCI and, to formulate and refine research projects.

Fundraising

The 2023 financial year included three major fundraisers.

- 1 The inaugural CatWalk Open was held at Wainui Golf Club in early October 2022. Despite Baltic-like conditions, a superb day of golf and fundraising ensued, raising over **\$40,000**.
- 2 After being delayed for two years, in October 2022 the Grocery Charity Ball was hosted in at Auckland’s Langham with great success. **\$300,000** was raised for spinal cord injury research through auctions, raffles and pledged donations. Our thanks to Don Graham and his fellow Trustees for selecting CatWalk as recipient charity.
- 3 Headed by our own founder, Catriona Williams, in February 2023 a group of passionate supporters hosted the Dig Deep for CatWalk event in Havelock North. Thanks to the sale of tickets and an art auction, **\$200,000** was raised.

Our thanks go to the following donors and supporters who continue to fund spinal cord injury research.

- Barenbrug, Farm Source, EquiBrands, Magnum Industries and Sims Metals, these businesses generously donated a portion of product sales.
- Bell Gully and Findex again provided pro-bono legal and accounting services respectively. Their services in-kind save the CatWalk Trust thousands of dollars, all of which go straight back into research projects.

Special mention must also be made for the significant contributions made by the following Trusts and individuals: the Thompson Family Foundation, Mrs Dorothy Cutts, Geoff and Trish of the Scarlet Trust, the Rodmor Charitable Trust, the Picot Trust, the Jones Foundation, and Mr Bruce Plested. All of these trusts and individuals have contributed so meaningfully throughout this year.

I’d like to particularly recognise Emeritus Professor Louise Nicholson who resigned from the Board in September 2022 due to poor health. Louise has had an immeasurable impact on spinal cord injury research in general and CatWalk in particular. Her knowledge of the injury second-to-none allowing her to guide the Board in our research prioritisation and funding decisions. It was my absolute privilege to sit next with her at the CatWalk board table.

I’d also like to acknowledge the other CatWalk Board of Trustees. Thanks to their strategic oversight and judicious governance, CatWalk’s precious funds are managed with the utmost integrity and pragmatism. I am extremely proud that the Trust remains in a robust financial position, ready and waiting to fund the next phase of outstanding spinal cord injury research.

Thank you

Thank you also to the CatWalk team – Chris, Donna and Meg – for their hard work and sincere passion. Thank you to our Founder, Patrons, and Ambassadors for their dedication.

But most importantly, I would like to thank our donors. We cannot make a difference without you. Thank you for your help in funding and helping to find a cure for spinal cord injury.

David Pretorius

Chairman, CatWalk Board of Trustees

See who you're supporting with your donations

Auckland

The NZ Brain Bee Challenge (NZBBC)

This high school competition encourages students in Year 11 to learn about the brain and its functions, the latest advances in neuroscience research and career pathways.

Annual commitment

Auckland

Spinal Cord Injury Research Symposium

A collaboration of stakeholders with a mutual interest in improving the lives of those with spinal cord injuries.

Auckland

Dr Simon O'Carroll

Spinal Cord Injury Research Facility (SCIRF)

Underpinning our research, the goal of the SCIRF is to maintain ongoing research programmes to develop novel treatments for SCI and to attract new ideas through local and international biomedical and clinical collaborations.

Total commitment: \$580,880

(committed until 2025)

Sydney

NeuRA, SpinalCure and CatWalk

Project Spark: sparking a revolution in the way spinal cord injury is treated

Building on the eWALK trial evidence, this project aims to take the research out of the lab and into mainstream use. Project Spark involves a series of rigorous clinical trials and community-based studies with the initial aim of improving respiratory, hand and upper limb function.

Total CatWalk commitment: AUD\$1,121,500

(committed 2023-2026)

Auckland

Dr Bruce Harland

Electroceutical therapies to treat spinal cord injury in a preclinical model

This fellowship will create and test second-generation bioelectric implants that are flexible, and use electrodes that are less prone to degeneration. It will focus on one of the most promising therapies to spinal cord injury and explore how well the implants are tolerated; seeking to provide evidence for axonal regeneration.

Total commitment: \$246,362

2023

1 April '22-
31 March '23

\$15,000

2024

1 April '23-
31 March '24

\$15,000

2025

1 April '24-
31 March '25

\$15,000

\$14,000

\$116,176

\$116,176

\$116,176

\$320,116

\$364,079

\$364,079

\$123,181

\$123,181

Auckland Dr Brad Raos

Computational modelling and analysis to inform electrical treatments following spinal cord injury and assist in development of electrical biomarkers

This impressive project will provide a means to both record and stimulate directly from the spinal cord. It has high potential to provide breakthroughs, not only in terms of treatment but also in understanding of spinal cord injury.

Total commitment: \$246,362

Auckland Associate Professor Darren Svirskis

Applying sustained electrical fields to achieve functional recovery after SCI

This project aims to determine the efficacy of sustained electrical fields incorporated into a bioelectronic implant to direct axonal regeneration after SCI.

Total commitment: \$337,942

Auckland Dr Sheryl Tan

Calcium binding buffer proteins and neuroprotection

A series of functional studies will be conducted using human spinal cord tissue and stem cells to see if the distribution of calcium binding buffers are altered in the injured spinal cord and therefore if they create neurodegeneration.

Total commitment: \$218,586

Auckland Dr Amy Chapman

Generating human oligodendrocyte precursor cells from adult human dermal fibroblasts – Project funding

Extension payment due to COVID-19 lockdown

This project will compare the viability and differentiation of cells encapsulated in 3D bio printed hydrogels verses the traditional flat 2D substrates.

Total commitment: \$55,833 +extension

		\$106,884	\$106,884
	\$64,700		
	\$115,592	\$11,768	
		\$1,952	
	2023 1 April '22 31 March '23	2024 1 April '23 31 March '24	2025 1 April '24 31 March '25
Total :	\$768,765	\$ 739,040	\$602,139

Thank you for all your support!

Your generosity enables critical research and gives hope to those with spinal cord injuries that they will walk again.

Spinal Cord Injury Research Facility

Progress Update December 2023 – Dr Simon O’Carroll

The SCIRF has had another productive year, making advances in two new exciting areas of research using a combination approach – targeting different components of the injury.

As spinal cord injury is a complex condition, it will be crucial to target the many different processes going on in the spinal cord in order to develop the most effective treatment, improving the likelihood of success.

A combination approach using our scar-busting gene therapy

This builds on our previous work showing that removing scar tissue from the injured cord using a gene therapy is beneficial in promoting recovery after injury. We now know that the enzyme we use to break down the scar tissue is involved in the growth of support cells called oligodendrocytes – which are crucial for nerve cells to function correctly and are lost after injury. The aim of this project is to 1) help protect and promote the regrowth of these cells, 2) remove the scar, 3) change the immune system to reduce inflammation, and 4) promote nerve cell growth. Masters student Calvin Young has been carrying out this project and has successfully modified the gene therapy so we can target it to the oligodendrocytes and has shown that we can target these cells successfully (Figure). He is currently testing whether this approach allows the cells to grow in the presence of scar tissue. The next steps will be to see if we can target these cells in our animal model of spinal cord injury and then to promote functional improvement.



A combination approach using a clinically used drug as a treatment for spinal cord injury

The other project currently underway is testing a drug that not only reduces inflammation but has the added benefit of promoting the growth of the nerve-protecting oligodendrocytes. We believe that having a drug that does both of these things will lead to a more effective treatment. We would ultimately plan to use this drug in combination with other interventions such as exercise rehabilitation. Importantly, this drug is already in clinical use and could be ‘repurposed’ for use in spinal cord injury – speeding up the process, as it has already been through trials in people to prove that it is safe. Honours student Kevin Roy, has just recently completed a pilot study testing the drug in our animal model of spinal cord injury. These results suggest that this drug reduces inflammation after injury and may lead to improved walking in our animals. These results are only preliminary and much more work will be needed to confirm our results, but we think it is exciting that our treatment may be working.

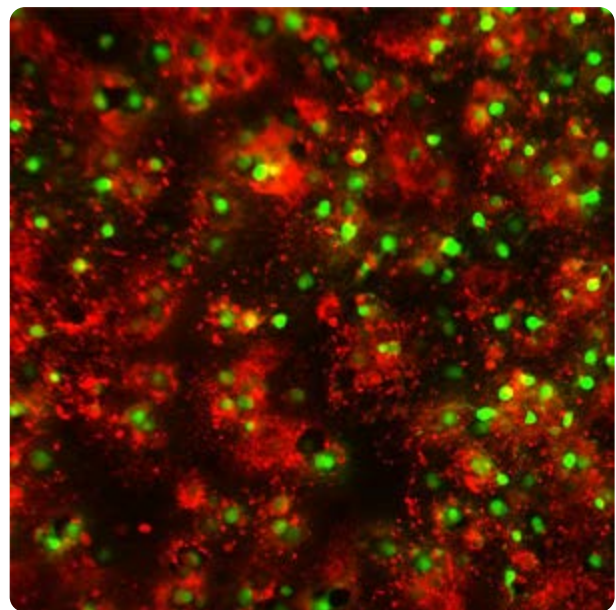


Figure: Image showing expression of our gene therapy (green) in the oligodendrocyte cells (red).

Research Update – Associate Professor Dr Darren Svirskis

On the research front we have confirmed exciting results produced earlier in 2023.

We implanted different groups of rats with our subdural implant which sits directly on the spinal cord and used this to apply electric field stimulation directly to the injured cord.

Starting the day after the injury, one group received a daily 1-hour electrical stimulation treatment from electrodes positioned on either side of the injury. Treatment was administered 5 days per week for 12 weeks.

Rats treated with daily 1-hour electroceutical treatments showed significant improvement in recovery of hind limb function from week 6 onwards compared with non-treated controls (Fig. 1). Of interest, while the non-treated animals plateaued at week 5 the electric field treated rats continually improved.

Alongside our electric field treatments we have been developing ways to deliver medicines directly to the spinal cord, and pharmaceutical science approaches to sustain the delivery of these medicines over time. This means a single administration of medicine can be released slowly over days and weeks.

Svenja Meissner, a pharmacist and senior PhD candidate, has created a liquid growth factor loaded formulation that can be pushed through a syringe and catheter directly onto the spinal cord (Fig. 2). The formulation then takes the shape of the cord and as it warms to body temperature in turns into a gel. This gel stays in position where it slowly releases the medicine payload to the body.

“Alongside our electric field treatments we have been developing ways to deliver medicines directly to the spinal cord.”

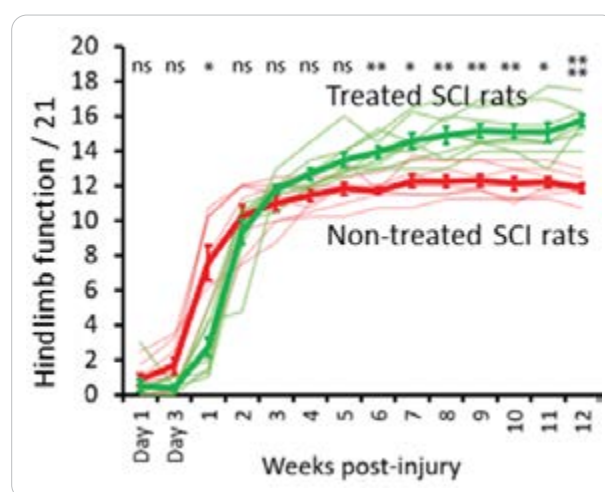


Figure 1: Electric field treated spinal cord injured rats (thick green line) show significantly enhanced functional recovery compared with non-treated spinal cord injured rats (thick red line) from 6 weeks post-injury onwards. Note the thin lines indicate individual scores.

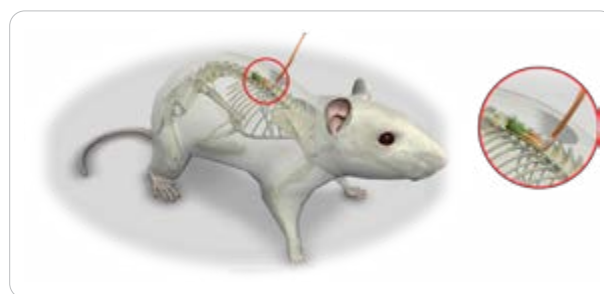


Figure 2: Schematic diagram of how an intrathecal catheter is used to deliver the hydrogel loaded with medicine directly onto the spinal cord.

Project Spark and eWALK

We have thoroughly enjoyed our partnership with CatWalk. Together we have established at Neuroscience Research Australia a gold standard foundation to produce reliable neurostimulation therapy results.

Four Project Spark clinical trials are now in train and at various stages of progress.

The critical research project, eWALK, which was initially envisaged to treat 12 people, has expanded to treat 50 people with an additional site opened in Melbourne. Professor Simon Gandevia is aiming to finalise results by the end of 2024. In order to meet this goal, Prof Gandevia has requested additional funding.

With Project Spark’s foundations firmly in place, we believe it is good timing to discuss the possibility of establishing a Project Spark clinical trial site in New Zealand. We also welcome NZ participants to visit an Australian site in the meantime.

Project Spark update

Thanks to CatWalk’s support, we have been able to fund four neurostimulation clinical trials in Sydney and Melbourne in Australia, and at three satellite labs internationally in Chicago, Toledo and Glasgow.

The purpose of this suite of clinical trials is three fold:

- to replicate, test and develop treatments for people living with spinal cord injury
- to offer spinal injured people a chance at benefiting from neurostimulation therapy now rather than waiting for a treatment to be made publically available in the future
- to produce a gold standard data set to support global efforts in the quest to further understand and cure spinal cord injury.

The following table provides a progress update for each of the four Project Spark clinical trials.

Clinical trial	Purpose	Number	Parametres	Sites	Funding
eWALK#1	To improve walking in paraplegics	Initially 12, expanded to 50	Double blinded, sham controlled testing neurostim and exercise therapy	Sydney, Melbourne and three international sites	SpinalCure and CatWalk (\$3.6M)
Get a Grip	To improve hand, arm and breathing in quadriplegics	Commenced second person	Testing neurostimulation and exercise therapy	Sydney, Melbourne, Perth and more	SpinalCure and CatWalk (\$2.25M)
eWALK#2	To improve walking in incomplete paraplegics and quadriplegics	Preliminary planning	Double blinded, sham controlled testing neurostim and exercise therapy	To be confirmed	Funds lobbied by SpinalCure from Fed Government (\$3M)
RRULI	To improve hand, arm and breathing in quadriplegics	Preliminary planning	Testing neurostimulation, exercise therapy and Acute Intermittent Hypoxia	Melbourne, Sydney and others	Funds lobbied by SpinalCure from Fed Government (\$3M)



Trial participant Francois Tuyau speaks about his experience and benefits gained from participating in eWALK.

Update on eWALK

The foundational and critical piece of research, the eWALK trial, is making excellent progress. So far half of the 50 people required have completed in 12 week protocol. Speaking to trial participants, it has been rewarding to hear of their stories about positive experiences and benefits gained both physically and mentally. Although it must be noted that we will not know which participants have received real or sham stimulation until results are finalised.

Trial participant Francois Tuyau spoke to members of the CatWalk Board this month about his experience and benefits gained from participating in eWALK.

We hope this was an informative exercise for CatWalk. Following his eWALK treatment, Francois has been able to greatly reduce his anti-spasm medication, improve his leg movement and ability to weight bear, and greatly improved his bowel function reducing the amount of time taken on his morning care routine.

Even though we don't know if he received real or sham stimulation, listening to the enthusiasm with which Francois talks about his eWalk participation and the physical and mental improvements he has gained, has been greatly inspiring. Pleasingly, eWALK has given Francois renewed hope and he reports he has found new motivation to re-engage with this rehabilitation.



Luminary 2024 – shining a light on SCI research

Join us for **LUMINARY 2024** as we shine a light on spinal cord injury research and illuminate the path to a cure.

LUMINARY 2024 is an evening of brilliance and hope, bringing together leaders, research innovators, and advocates for SCI research. It's an event that celebrates luminaries of our time while paving the way for a brighter future.

Over the past decade, CatWalk has made significant investment into SCI research, developing a strict process to ensure that we only fund the most promising of research, with a great deal of importance being placed on projects aimed at improving collaboration and integrated scientific standards.




Our aim now, is to accelerate the development of treatments for the injured spinal cord. We will advance promising treatment approaches to get them to patients more quickly and safely.

A “cure” in spinal cord injury (SCI), is any intervention to return greater functionality after a SCI. It applies to the acutely (newly) injured, as well as the chronically (long term) injured – it is so much more than not being not be able to walk again.

The format will be a welcome reception followed by a sit-down dinner with entertainment throughout the evening. Funds raised on the evening will be in the form of a live and silent auction.

Glow up – be your best self at Luminary 2024.

Event details

-  Dinner and Auction
-  22 June 2024
-  Eilerslie Events Centre, Auckland

Tickets available at:
catwalk.org.nz/luminary2024



LUMINARY / 2024

Illuminating the path to a cure

The CatWalk Spinal Cord Injury Research Trust take pleasure in inviting you to an illuminating event.

Dinner & Auction
Saturday 22nd June 2024 at 6.30pm
Newmarket Room
Ellerslie Event Centre
Tāmaki Makaurau Auckland

Tickets: \$325.00pp

Dress code: Glow up, be your best self

Tickets available at catwalk.org.nz/luminary2024

 **CATWALK**TM
Funding research to cure spinal cord injury



Latest NZ SCI Statistics report available

The NZ Spinal Cord Injury Registry (NZSCIR) has released the latest report for 2022 data.

The NZSCIR aims to record every new SCI in NZ each year. Various data is collected via admissions at Middlemore Hospital and Auckland Spinal Rehabilitation unit in the North Island, and Christchurch Hospital and Burwood Spinal Unit in the South Island. This data assists in tracking how many people sustain a SCI, alongside such information as what the causes are, demographics and other relevant fields.

The project started in 2016 and continues to build a comprehensive set of results that will assist in future planning of services, treatments and support for those living with SCI.



The report is available to be viewed online: bit.ly/NZSCIR



Dr Anna Leonard from the University of Adelaide presenting on her wide-ranging research into spinal cord injury.

SCI Symposium

On the 9th of Nov the Auckland University had the pleasure of hosting the 2023 Spinal Cord Injury symposium.

This is the second time this event has been held and it was pleasing to see an increase in interest with 75 attendees, all with a mutual interest in improving the lives of those with spinal cord injuries.

The stakeholders assembled include those with a lived experience of spinal cord injury, supporting organisations, clinicians, researchers and of course the CatWalk folk. The symposium was designed to increase understanding of the needs for those with a spinal cord injury, to explore health care services available, to allow dissemination of research findings related to spinal cord injury, and to assist in formulating new research concepts.

Following a Karakia by Lee Taniwha, there was a brief introduction from the represented groups in the room:

- Auckland Spinal Rehab Unit (Leah Young)
- Burwood Academy (Rebecca Coombes)
- Spinal Support (Georgia Cameron)
- Burwood Spinal Unit (Raj Singhal)
- NZ Spinal Trust (Hans Wouters)
- CatWalk (Grant Sharman)
- Care up Front (Lee Taniwha)
- ROPE Neuro Rehabilitation (Lillian Drummond)
- ACC (Sonya Iszard)
- Auckland University of Technology (Kate Anderson)

This was followed by a panel discussion on Lived Experiences – Post Injury Experiences with Physical Rehabilitation. The panel consisted of Brad Smeele, Sally Barkman, Sophia Malthus, Lee Taniwha and Simone de Mari. They each gave an insight to their injury and what they do in terms of rehabilitation and outcomes.

A presentation from Rebecca Coombs from the Burwood Academy highlighted the research being undertaken in the rehabilitation space. This was followed by Greta Minty and Christine Mangold who gave the latest statistics to be released from the 2022 Spinal Cord Injury Registry. A comprehensive overview of current research being undertaken at Auckland University was presented by the project lead researchers and Dr Simon O'Carroll, head of the Spinal Cord Injury Research Facility.

In addition to the local talent present we were joined by Professor Riyi Shi from Purdue University in the US, and Dr Anna Leonard from the University of Adelaide in Australia. Not only did they give interesting talks regarding current research into spinal cord injury, but they also spent time before and after the symposium interacting with researchers at the University of Auckland to cross pollinate ideas and activities.

The work being done in Upper Limb Reconstructive Surgery in Tetraplegia was presented as one of the discussions in the Health Care Professionals session which was followed by an open discussion and questions session.

Dr Darren Svirskis and Catherine Kerins are to be congratulated for planning and presenting an informative day, with a great opportunity for networking and opening conversations between stakeholders who all have a common goal – to find a cure for spinal cord injury.

“A comprehensive overview of current research being undertaken at Auckland University was presented by the project lead researchers.”



Dr Anna Leonard



Professor Riyi Shi



Dr Brad Raos

Spotlight – Luke Alderton

Luke Alderton (23) has never known life outside of a wheelchair. At 6 months of age Luke experienced the onset of Transverse Myelitis resulting in a C2-C7 incomplete spinal cord injury. A long recovery period followed with some months in Starship hospital before parents, Alison and Steve, took Luke home to join big sister Emma.



Luke with his sister, Emma and her fiancé, Max.

Fast forward to November 2023 and I had the immense pleasure of meeting Luke, Alison and Steve recently at their home in Christchurch. At this time Luke had just wrapped up his final exams at Canterbury University, and was poised to be admitted to the Bar as a Barrister and Solicitor in December following the completion of his LLB.

A young man brimming with enthusiasm and a thirst for knowledge, Luke has not only earned his LLB but also achieved a BA with a double major in Economics, Political Sciences and International Relations.

The period of study during the COVID-19 pandemic brought about challenges with restrictions preventing physical presence on campus. Luke pointed out that it did not compromise the quality of the study but the loss of connections with people was noticeable. While his involvement in the Political Science club helped him maintain connections during those years, it's worth noting that he predominantly remained within the confines of his home. Ironically, Luke contracted COVID-19 at a family wedding, and, apart from a temporary dip in energy levels at the time, he has experienced no lasting effects.

During his time at Canterbury University, Luke found invaluable support from Disability Services (now known as Student Accessibility Services). This support extended beyond helping with campus logistics, encompassing technology assistance and note-taking support. Luke expressed his appreciation, saying, 'They were top notch,' as they empowered him to fully engage with his fellow students on an equal footing.

Having sustained his injury as a baby, Luke retains no memories of his early rehabilitation. He attributes his recovery to the dedication and thorough research

his parents undertook to ensure he had access to every available resource as he grew. Part of his current daily routine involves spending time in a standing frame, which helps him maintain his physical fitness and also aids in managing his rather robust spasms – which Luke humorously likens to ‘a bit like riding a bike at times!’ He views these spasms positively though, as they help keep his muscles toned and assist with blood pressure regulation. Additionally, at the age of 12, rods were surgically placed in his back to address the onset of scoliosis.

Luke is passionate about sports and embarked on his journey in **power chair football** at the age of 9. His commitment and skill led him to represent New Zealand on the international stage, serving as team captain from 2018 until he recently decided to take a hiatus. This unique sport is predominantly played in international competitions and the Australian domestic league, and in recent years, New Zealand has witnessed a decline in its participation. Currently, there is a concerted effort to revitalize the sport in

New Zealand, and Luke, along with his parents, are enthusiastic about promoting the sport and encouraging more individuals to get involved.

With his exams behind him, Luke now has a couple of months to unwind before he assumes a position within the tax team at PwC, beginning in 2024. This role was offered to him following a successful internship during his studies.

As he contemplates his future, Luke eagerly anticipates a forthcoming journey with PwC. In addition to his professional aspirations, he nurtures a deep passion for politics and aspires to contribute to positive change, whether through a visible or behind-the-scenes role. He recognizes the importance of diverse voices in addressing the multitude of challenges in today's world.

Having spent a couple of hours in Luke's company, I am confident that his positive energy will continue to empower both himself and others for a bright future.



Luke with his parents, Alison and Steve.

Power Chair Football

Played in a specifically designed strike force power chair, that enables the players to turn quickly and use the cage on the bottom of the chair to “kick” the ball.

Powerchair football is a competitive team sport for people with physical disabilities who use powerchairs for their mobility. The rules are similar to outdoor football with a few modifications.

Players include people with quadriplegia, neuromuscular conditions, cerebral palsy, head injury, spinal cord injury and other disabilities.

The game is played in a gymnasium on a regulation basketball court. Two teams of 4 players use their powerchairs to attack, defend and spin-kick a 13 inch football in an attempt to score goals. Every powerchair has a guard to hit the ball.

Requirements – All players:

- Need to be using a powerchair
- Must be 8 years and over
- Must have sufficient control to ensure everyone's safety

Read more at: www.nzpf.nz

Transverse Myelitis

Transverse myelitis is an inflammation of both sides of one section of the spinal cord. This neurological disorder often damages the insulating material covering nerve cell fibers (myelin).

Transverse myelitis interrupts the messages that the spinal cord nerves send throughout the body. This can cause pain, muscle weakness, paralysis, sensory problems, or bladder and bowel dysfunction.

There are many different causes of transverse myelitis, including infections and immune system disorders that attack the body's tissues.



A successful North Island Brain Bee Challenge.

Brain Bee Challenge

The North Island regional final of the New Zealand Brain Bee Challenge was held on the 21st June 2023. This year marks the 17th anniversary of the North Island Brain Bee Challenge held in the Centre for Brain Research at Auckland University.

One hundred and seventy students from 38 North Island schools converged on the Faculty of Medical and Health Sciences at the University of Auckland to compete in the Teams and the Individual participant competition.

Students also interacted with university students and staff scientists and heard an inspiring talk from our guest speaker, Dr Justin Rustenhoven, about his research and career to date. A highlight for the students is visiting the AMRF Learning Centre and other displays, watching some science in action and engaging with scientists in a 'meet the scientists' and careers in science session.

The chance to visit the university greatly incentivises students to participate in the competition and it has a significant impact on some students – a current second year pharmacology student relayed how me she took part in the Brain Bee in 2019 and the visit inspired her to pursue studies in biomedical science and neuroscience.

The Brain Bee competition was exciting, and first place in the team's competition went to a mixed Baradene College/Palmerston North Boys High School team,

with second place awarded to a team from Rototuna High School/Te Aroha College. Finally, students from St Cuthbert's School for Girls was awarded third place. The organisers were pleased to see a good mix of schools do well in the team's event, and the teacher from Rototuna High School was absolutely thrilled to place highly in both finals as a first-time competitor.

For the individual Brain Bee competition, the top 10 highest-scoring students from the Round 2 online quiz were selected to participate in a final live quiz round to crown the North Island Brain Bee champion.

Auckland schools dominated the top positions, with two students from Rototuna High School making the final. There was fierce competition, and it was clear that the top place-getters had a strong understanding of the material. Xin-Xin Zhu from St Cuthbert's College was this year's competition winner and North Island Brain Bee Champion. Anna Li from Macleans College was second and third place went to Kate Healy from Rototuna High School. It was a very close competition, with Xin-Xin winning in a sudden death round. She will go onto compete for the New Zealand Brain Bee Challenge Champion title in Brisbane, Australia later in the year at the Australasian Neuroscience Society meeting. The Australian state/region winners will compete in the same event to determine the Australian Brain Bee champion.

CatWalk Chairman, David Pretorius, was on hand to present at the prize giving, and was thanked for the ongoing support that CatWalk gives to the overall success of the event.

Frustrating Moments – Hamish Ramsden

You know when you have those moments where nothing seems to go right and you feel that everything is going against you; whether it be big or small and you are wondering what to do to break through?

One of my favourite sayings that encapsulates this feeling is that “you get experience just after you really need it!” So, what do you do? Do you throw your arms in the air and storm off? Do you swear profusely and beat the living hell out of the bit of machinery you are trying to fix or do you do as we all should do and that is to stop, pause, take 10 deep breaths (no one really does this right?!) and then blame someone else. At least this makes you feel better.

We don't like to admit when we are wrong and no don't tell me that I should have read the instruction manual, sure it might have helped but there is certainly no way I'm going to do it now, my pride is at stake. If we're lucky enough we can perhaps pawn the job on to someone else, but if it is a matter of intrinsic personal pride, we should and will persevere, as what were we going to do for the next

few hours anyway? I had one of those moments some time ago. After having had an operation to fix a skin issue on my bum, I was confined to bed rest for quite some time and so was reliant on whatever technology I had available to help lessen the boredom of the day. First up I'd listen to the radio and that worked well although I'm not a great talkback fan as I get sick of all the whingeing and moaning. Then after lunch we (my carer would have to do it for me) tended to flick the tv onto sky and watch whatever program was available.

My moment happened during this bedrest which happened to be at the same time that I was building a house, not really a situation to be recommended as it is not really the best way to keep on top of things. So, what with not being able to visit the site at least I had an earpiece and a mobile phone that I could use by voice commands to keep in contact with various people. Although getting incredibly frustrated at times not been able to visit the site, it was no one else's fault really. So, I just had to lie there and suck it up.

But this is where frustration really hit me big time. For those of us who are paralysed, we learn to train ourselves to not get frustrated at every little thing we encounter, as there just so many of them; but

“For those of us who are paralysed, we learn to train ourselves to not get frustrated at every little thing we encounter, as there just so many of them; but every now and then we get tipped over the edge.”

every now and then we get tipped over the edge. This happened to me whilst trying to voice activate my phone to ring my builder and my phone continually getting my command wrong. Out of frustration I started yelling and swearing at it, utilising the outer limits of my vocab, only to take a breath and then hear the phone say back to me “I'm sorry, I don't like your tone of voice!!!” If my head could have exploded it would have. If I could have picked up the phone and thrown it out the window, I would have.

Being on bed rest and being pretty in-capacitated I couldn't do anything other than boil in my own rage. The lowest of the low had just happened, I had been told off by a electrical device. I don't know if you can get to a lower point than that.

So, what did I do about it? What did I do to maintain my manhood? to maintain my authority over all things electrical, to regain my status at the top of the food chain to where I would never get queried again about my capacity for decision-making. I needed the ultimate revenge, the ultimate lust for that feeling of retribution and bummer the saying that revenge is best served cold, my revenge was served piping hot. What I did left the sweetest taste, the sweetest feeling. I let my phone go dead.



Hamish Ramsden and Catriona Williams



Dr Alex O'Keefe demonstrating Kera sit2sit

HT Systems

HT Systems is a Christchurch based assistive technology company on a mission to change the way people move by developing products to support wheelchair users and those who care for them.

Well known Kiwi inventor Professor Keith Alexander of the University of Canterbury wouldn't accept that his children jumping on a trampoline should be at risk of serious injury, so he created the Springfree trampoline which has become the world's safest trampoline and saved millions of hospital visits for children around the world.

Similarly, when Keith learned that caregivers at the local hospital were being injured regularly from moving patients, he set about developing a better solution and founded HT Systems. The company's flagship product, the Kera sit2sit, is a new type of hoist that allows a sole caregiver to effortlessly support a wheelchair user who requires assistance with transfers between seats. The Kera is helping individuals and couples retain independence by taking the time and strain out of the transfers.

HT Systems are delighted to be supporting the Charly project by donating a Kera hoist for wheelies who may need it on their journey. Perfect for the road trip, the Kera is compact, lightweight and requires no batteries. It makes transfers quick and easy, leaving more time and energy to spend on adventure!

HT Systems CTO, Dr Alex O'Keefe, is passionate about developing products that have the potential to revolutionise mobility. Alex's younger sister is a wheelchair user and growing up she would use piggybacks on her older brothers as her means of transferring from her wheelchair. Alex's understanding of what it's like to be a transfer device has driven him to develop new ways for people to move, particularly the new lifting vest as in the image shown. This revolutionary new product can lift a person out of a wheelchair via just a 'hug' around the upper body. Paring the lifting vest with an overhead hoist allows a whole new freedom of movement. It is an exciting time in the product journey as it is ready to be trialled by users to find its true potential to wheelchair users. Knowing his sister's passion for outdoor pursuits, Alex envisions ways it could be used for simplifying transfers onto horseback or sit-ski.

As a fledgling technology company, HT Systems is in a growth phase and is limited not by its aspirations but by resources and capital. They recently raised capital to speed up the launch of current products in the pipeline and to support the growth of the Kera into larger markets in North America and Europe. They are open to strategic investment relationships to join their growth journey.



HT Systems



Learn more about the Kera sit2sit:
htsystems.co.nz

“HT Systems are delighted to be supporting the Charly project by donating a Kera hoist for wheelies.”

WHEELIE CAMPERVAN COMING SOON for any wheelie to hire

If you'd like to know more, send your name, address, phone & email details to chris@catwalk.org.nz



Supporting Positive Futures



CHARLY PROUDLY SUPPORTED BY

greenstonepartners

SITIPEK

HUGO
CHARITABLE TRUST



JEAN + ROB
JOHNSTONE

JONATHAN
MUNZ

Supporting



Supporting Positive Futures

The Great NZ Tee-Off a GREAT Success!



Imagine a scenario where thousands of golfers simultaneously tee off nationwide, all in the spirit of charity. This vision materialized into The Great NZ Tee-Off (TGNZTO), initiated by CatWalk Ambassador Ollie Bradshaw and a dedicated group of friends in early 2023.

They embarked on a mission to enlist golf courses from Northland to Southland, seeking donations of tee times for a synchronized play at 1pm on November 24th.

The response was remarkable, with over 300 tee times secured from 150 clubs. These valuable slots were then auctioned on the Galabid platform in September, resulting in an impressive fundraising total of over \$60,000. The proceeds were generously donated to three charities – CatWalk, Hope Without Fear, and Movember.

Heartfelt appreciation goes out to Ollie, the tireless volunteers who devoted countless hours to bring TGNZTO to fruition, the supportive clubs and sponsors, and to all the players who participated. We sincerely hope you had a fantastic day!



Learn more:
greatnzteeoff.co.nz



The only time
we're looking for
below par
support!

Come join us for

The CatWalk Open

SUPPORTED BY JARDEN

Thursday 14th March 2024
@ Wainui Golf Course,
North Auckland

Wainui.
EAT. PLAY. MEET

Teams will compete for the coveted
CatWalk Blazer while
supporting spinal cord injury research.

Special prizes and events
throughout the course!

For further information and registration
www.catwalk.org.nz or email info@catwalk.org.nz

**SPONSORSHIP
OPTIONS
AVAILABLE!**

 **JARDEN**
New Zealand's leading investment and advisory group

 **CATWALK**TM
Funding research to cure spinal cord injury

Thanks



ASPIN & CO

New Zealand

Aspin and Co are a New Zealand-based luxury equestrian apparel brand.

Owner Annmarie very kindly donated 10% of all online sales of the Luxe collection in August resulting in a generous donation of **\$1,052.50**.

Look out for their next promotion supporting CatWalk.

aspinandco.com



The Victoria University of Wellington Joan Stevens Hall Run Club collectively ran the length of New Zealand (1,600km) resulting in a generous donation of **\$1,075**.

“By running for those who can’t we aim to support the trust in raising money towards Spinal Cord Injury research.”



David Howden of Computer Partners has been a wonderful supporter of CatWalk since the early days.

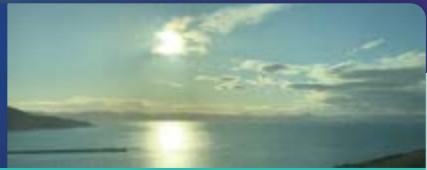
For all our computer needs, programmes and those HELP calls – David was our port of call and with his calm demeanour and great knowledge was able to put us at ease! On the 1st August this year David passed Computer Partners on to new ownership and stepped back to semi-retirement.

Thank you David for everything you did for CatWalk and we wish you a happy future.

computerpartners.co.nz

Corporate Supporters





Donate to spinal cord injury research

Your donation will help fund world-class spinal cord injury research and contributes to our vision of a world free from spinal cord injury research.

Become a Core Supporter

Just as a strong core is needed to support our bodies, our Core Supporters strengthen our ability to fund innovative spinal cord injury research by giving a donation regularly.

Leave a legacy by naming CatWalk in your Will

Leaving a gift in your Will could benefit spinal cord injury in a transformational way by ensuring the vital research endures until a cure is found.



[Donate Here](#)

Credit Card, Internet or Phone Banking

Donations can be made using either Visa or Mastercard or by internet or telephone banking:

Account name: **The CatWalk Spinal Cord Injury Trust**

Account number: **02-0108-0525933-00**

Bank: **Bank of New Zealand**

Branch: **Private Bank**

International donations

The additional details required for an international transfer are:

Physical address: **Level 29, 188 Quay Street, Auckland 1010, New Zealand**

Our banks details: **Bank of New Zealand, Wellington, New Zealand**

SWIFT BIC code: **BKNZNZ22**

Clearing code **NZ020108** (If required)

If paying by Direct Credit, please ensure the following details are provided so we can track and receipt your donation:

In the Internet bank field called "particulars" add your name

In the Internet bank field called "reference" add your phone number



06 377 5430



PO Box 555
Masterton 5840



www.catwalk.org.nz
info@catwalk.org.nz



[FACEBOOK@thecatwalktrust](https://www.facebook.com/thecatwalktrust)
[INSTAGRAM@catwalk_trust](https://www.instagram.com/catwalk_trust)

Charity
Certification
CC27170